

Metamorphosis



Into a New Era →

Vol 1, Nbr 4

For the CoCo/OS9/OSK Communities

September 1993

Telecommunication Issue!

The CoCo/OS-9 BBS Listing

The OS-9 Community Net History

Part III of The Art of Programming

Review: InfoXpress!



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| | |
|-----------|-----------|
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| 80 x 50, | 100 x 40, |
| 132 x 25, | 132 x 28, |
| 132 x 44, | 132 x 60 |

Foreground, background and border colors are user selectable from up to 16 colors.

Eleven graphics modes are supported -

| | |
|------------------|------------------|
| 640 x 200 x 16, | 320 x 200 x 256, |
| 640 x 350 x 16, | 640 x 350 x 256, |
| 640 x 480 x 16, | 640 x 400 x 256, |
| 800 x 600 x 16, | 640 x 480 x 256, |
| 1024 x 768 x 16, | 800 x 600 x 256, |
| | 1024 x 768 x 256 |

Text and graphics modes may be selected by a utility provided, MODESET, by software using SetStt calls, or by termcap entries. In the text mode, the screen responds to standard VT100 control sequences. The full character set from Hex 20 through Hex FF is supported in text modes up to and including 100 characters wide. The upper 128 characters follow the 'IBM Character Set 2' popular with many terminals and printers. These may be displayed on the screen by using the 'Alt' key and one or two other keys (software permitting).

G-WINDOWS option provides 3 screen resolutions; 640 x 480 x 256, 800 x 600 x 256 or 1024 x 768 x 256. You can have 2 full size 80 x 25 windows with room to spare. Or, a window as large as 122 x 44 using the large fonts or a window over 180 x 70 using the small fonts.

delmar co

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Metamorphosis

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This publication is composed, formatted and master pages created, entirely on machines running the OS-9 operating system.

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On the Front Cover

Shown is a picture of Stone Mountain, Georgia. This spot near Atlanta, is a popular tourist attraction and park. Atlanta CoCoFest goers may make a side trip to visit and relax. This picture was printed from a 640 x 480 pixel, 8 color GIF file.

From The Editor's Desk



Here it is September already! Where has the year gone? The leaves on the trees in Missouri already have started changing colors. Halloween and Thanksgiving are just around the corner, and then Christmas will be upon us. If you are like Mark, you have already started formulating your Christmas Wish List and maybe even dropping hints. You know, saying things like, "If someone really loved me they would buy me such and such this year for Christmas." Note: Putting it in writing may insure you actually get what you want.

We have a name! Because of the lack of response to our "Name That Magazine" contest, Mark decided to choose his own name: *Metamorphosis*. (There were only eight responses to our query, and the majority of these were new submissions instead of votes for the names already submitted.) Mark and I both feel the name *Metamorphosis* is a fitting one, all things considered. We hope you agree.

I have been very busy the last couple of weeks learning to drive a school bus. After driving my route alone on the first day, I went home and threatened my own children that if they ever gave a bus driver a hard time I would let them have it. Believe me, it is hard work indeed to be a bus driver. I'm surprised how physical it is. I am using muscles I forgot I even had.

As a bus driver, I would like to make a couple of requests. One, please do not pull up as far as you can in the left turn lane if there is a bus trying to come around the corner. Contrary to what must be popular belief, buses do not bend in the middle. The angle of some turns makes it physically impossible for us to get through the turn without taking up the left turn lane of the street we are turning into. Giving us dirty looks while mouthing curses will not make the bus any easier to get around the corner the next time.

Two, passing a school bus while honking your horn and yelling obscenities will not make us go any faster. It can take as much as the length of a football field for us to stop, so we are not as likely to go any faster than we need to, even though there are days when we would like to drive 70 mph to get rid of the trouble maker in the back. Also, the speed limits that are posted on the road ways are for cars. Cars do not bounce and rock like a school bus. Cars are not top heavy and will not flip over easily. We usually have to drive slower than the posted speeds, especially if the weather does not cooperate. Also, we have to watch out for tree branches and other things hanging in our path.

Third, PLEASE, PLEASE, PLEASE do not pull your car right up to our bumper when you are behind us at a stop light. We can see the top of your car in our mirrors, but we have no way of knowing just how close you really are. And believe me, these six ton babies roll quickly. A bus could be up over your hood and into your windshield in no time at all. Besides, who wants to inhale all of those diesel exhaust fumes anyway?

Fourth, I realize it is a pain to be behind or even approaching a school bus dropping or loading children, but racing by when the red flashers and stop arm are out is not the answer. The one to two minutes saved by racing by a stopped school bus cannot be worth jeopardizing the life of a single child.

Lastly, if you receive a complaint that your child is acting up on the bus, take it seriously. Students are written up only after repeated verbal warnings. One student acting up can disrupt a good one third of the students on the bus. Our write ups are our way of asking for help from the parents. Believe me, if you are transporting 70 rowdy students, the last thing you need is for one student to get one third of them even rowdier. It does no good for parents to tell their children they will "go down and give that old, mean bus driver what for" or even "beat them up." Well, enough car driver bashing.

Mark will be at the Atlanta CoCo Fest coming up in early October. If you are planning to attend the fest, stop by to see him.

Karlana

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Subscriptions Come In

Dear Mark and Barbara:

Thank you for your letter of August 25th. I am really anxious to get the September issue. I hope that the readers find it interesting.

Please find my check for \$24.00 for 12 issues of the NoName Magazine. I have really enjoyed reading it so far. Keep up the good work.

David Wordell

Dear Barbara:

I wish to subscribe as I liked the August sample I received. I am treasurer of the Glenside Color Computer Club. I have many CoCos and hardware, 20 and 30 Meg hard drives, 720 and 1.4 floppy drives (20 or more of each). I never could really understand or use OS9. I wrote one good program in Basic (Video Movie Catalog). My CoCos are piled away in the basement. I am using a 486DX33 plus 340 Meg HD and CD Rom, but not for programming. I just want to help you get started.

Our Glenside Group is the nicest bunch of people, and many are super smart—just a great bunch of guys and gals.

On behalf of Glenside, good luck!

George L. Schneeweiss

Dear Mark and Barbara:

Enclosed please find my \$24.00 for a magazine subscription. I've enjoyed the first issues you sent. They are a promising start.

Good luck with this project. I hope your financial problems are solved soon.

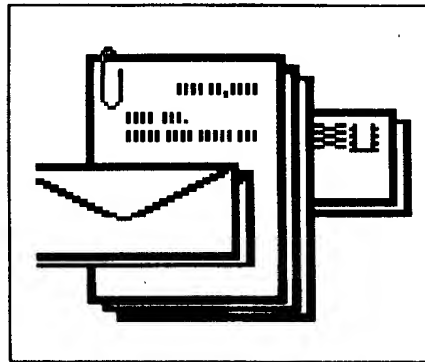
John G. Brown

With subscription checks coming in it isn't such a chore to walk out to the mailbox anymore. (Finally, something other than bills and junk mail!) We hope you continue to enjoy our publication, John, and that you will write us with suggestions or just plain comments.—Barbara

Dear Barbara:

I am glad you are going on with the new magazine. A name? How about New Rainbow? Silly? I am not good at this!

I am enclosing a Money Order International for \$24.00 American for a subscription of one year. I am looking forward to receiving this new magazine.



I hope you have many Canadian subscribers. We are starved in Canada for CoCo literature or feedback. Bob van der Poel may have a mailing list he would let you use for publicity. I have many of his programs; they are the best.

Thanks for working on keeping us CoCoists informed and . . . entertained. Good luck.

Mrs. L. Boulton

Nice to hear from you again, Mrs. Boulton! We're glad you decided to join us. Keep in touch, and thanks for the tip on Bob's mailing list.—Barbara

Dear Mark and Barbara:

Your August issue arrived today. Looks good, keep it up. The issue arrived with a stamp on it saying 'Postage Due .22 cents.' You might want to check with the post office on this. The envelope had a 75 cent stamp on it.

Enclosed is a money order for \$32.00 US for a one year subscription. My address is below.

I hope you continue with the 'On a Lighter Note' articles, such as the one in your premiere issue, and August's 'The 10 Commandments for Technicians.' They help to lighten things up a little.

Colin McKay

We do plan on having something for "On A Lighter Side" each month if we can. The biggest problem is finding material that relates to something in each issue. If you have anything you'd like to send in, please do. We'll give you full credit, of course.—Barbara

Hello Mark and Barbara:

Here's my check for \$24.00 for a subscription to the 'No Name' magazine. I just finished reading number three, and I do like the way it's shaping up. Keep it up—-you're both doing great!...And thanks to you and Barbara for a great OS-9/OSK mag!

John Baer

Glad you like our publication, John. Thanks for the compliment and the subscription.—Barbara

News Clips

Ready For Atlanta?

With the Atlanta CoCoFest just around the corner, I spoke with Alan Dages, a member of the Atlanta Computer Society, the host of the show. Alan was not sure of his figures, but he estimated they might have up to 45 vendors at the show this year and may have to open up two rooms. He also speculated that the size of the crowd this year might be double that of last years 200 plus.

All-in-all, it looks like a real fine show shaping up. If you can get away for a couple of days, please get yourself to Atlanta and check it out. There will be many items there for all to see, as well as meeting old friends.

Last Free Issue

Just a reminder to all our readers. This is the last free issue from our introductory period. We hope you have enjoyed reading these issues and have found our efforts worthwhile. If you would like to continue reading *Metamorphosis*, then please send in your subscription soon.

Barbara and I would like to thank everyone for their patience and kindness during this introductory period. We have learned a lot that will help us to put out a better magazine.

In The Next Issue

Next month will be the premier issue. What better way to start off our journey into a new OS-9 era than to feature an item long waited for to enhance one of the most popular OSK machines. A complete review of the newly available MM/1 accelerator boards from Kevin Pease will be featured in October's issue. Make sure you get yourself a copy to see what all the noise is about.

The accelerator boards will be one of the many new items on sale at the Atlanta Fest. Check it out!

Mark Griffith

Announcing

Icon Basic09

The next programming language for OS-9!

Icon Basic09 is a graphical user interface (GUI) to Basic09, which will make programming easier than ever! Icon Basic09 takes an innovative approach by using graphic representations, or icons, to represent statements and keywords for writing Basic09 programs and procedures. Instead of constantly typing while writing a program, the user can simply point & click to choose the desired statement!

Icon Basic09 can also be very useful in studying procedures and programs written by others to learn how they operate. The package contains a full set of icons...or, you may edit or create icons using the included icon editor. Icon Basic09 requires a CoCo-3 with at least 256k, mouse or joystick, and OS-9 v2.

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|--|-------------|
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The Art of Programming

Part III

Program Flowcharting

by Shaun Marolf

Shaun Marolf, 30, is a member of the US Navy stationed at Naval Air Station San Diego where he is currently working on his degree in Computer Sciences. He first learned programming in 1979 on an Apple II Plus and is also schooled in electronics and digital circuits. Shaun runs the "Eight Bit Heaven" BBS (619-447-2111) and owns several computers, including an original grey case CoCo 1.

In part two we left off with some rudimentary skills in flowcharting and explained a few of the symbols. We discussed the need for planning the look, feel, and operation of the program. At this point, we are ready to start flowcharting the logic and operations of the program. There are some basic steps to follow in programming:

1. Proceed in small steps. Do not try to do too much at one time.
2. Divide large jobs into small, logically separate tasks. Make the sub tasks as independent of one another as possible, so they can be tested separately and so changes can be made to one without affecting the others.
3. Keep the flow of control simple to make programs easy to follow and errors easy to locate and correct.
4. Use pictorial and graphic design descriptions as much as possible. They are easier to visualize than word descriptions. This is the great advantage of flowcharts.
5. Emphasize clarity and simplicity at first. You can improve performance (if necessary) once the program is working.
6. Proceed in a thorough and systematic manner. Use checklists and standard procedures.
7. Do not tempt fate. (It will usually win.) Do not use methods you are unsure of, or use them very carefully. Watch for situations that might cause confusion and clarify them as soon as possible.
8. Keep in mind that the program must be debugged, tested, and maintained. Plan for these.
9. Use simple and consistent terminology and methods. Repetitiveness is no fault in program design, nor is complexity a virtue.
10. Have your design completely formulated before you start coding. Resist the temptation to start writing down instructions: it makes no more sense than making parts' lists or laying down circuit boards before you know exactly what will be in your system.
11. Be particularly careful of factors that may change. Make the implementation of likely changes as simple as possible.
12. Keep the overall task in mind. Build a total framework in which individual pieces can be defined and tested. Do not leave the entire program integration to the end.
13. If the data is complex or there are numerous relationships between data items, you must organize your data just as carefully as you organize your program.

Not every design system is perfect, however. Flowcharting advantages tend to heavily outweigh the disadvantages and you should be aware of them.

1. Flowcharts are difficult to design, draw, or change in all except the simplest of situations.
2. There is no easy way to debug or test a flowchart. (However, it can lead you to where the bug is.)
3. Flowcharts tend to be cluttered. Designers find it difficult to balance between the amount of detail needed to make the flowchart useful and the amount that makes it a little better than a program listing.

4. Flowcharts show only the program organization. They do not show the organization of the data or the structure of the I/O modules.
5. Flowcharts do not help with hardware or timing problems or gives hints as to where these problems might occur.
6. Flowcharts allow unstructured design. There are no rules governing the number of entries and exits, the number or types of interconnections, or the logic that may be employed.
7. There is no obvious way to represent the simple repetition of a loop.

The disadvantages are formidable, but the advantages far outweigh them. A disadvantage can be turned into an asset. Point 6 is actually more of an asset because even though flowchart structure has no rules, programming structure does. We can tailor the flowchart to fit the rules of the language in which we're working. By following the rules of the language we then have a set of rules for our flowchart. In point number 3, there is also a hidden advantage. We can use a weaker drafting for more easily understood sections and a more detailed drafting for those sections which may be unclear or require more documentation.

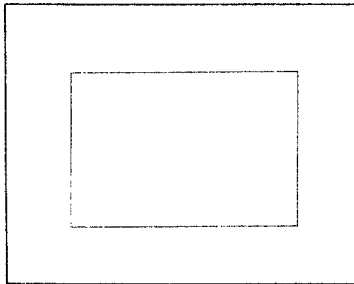
In fact, the only true disadvantage of flowcharting is the amount of time it takes to do it. It can and often does become tedious, but the amount of time you may save while coding and debugging will often make up for this.

Flowcharting the operational portion of the program is a very detailed and tedious task and will often tend to strain the eyes after some time. By no means should you continue at this point. Take a break when symptoms of fatigue appear. You will be more apt to make a critical mistake when

tired.

Flowcharting is really nothing more than a map. The direction the program will take is dependent on what we want the computer to do and what the computer is logically following.

The first symbol in an operational flowchart is the **TERMINAL** symbol. This symbol should only be used twice in any flowchart. Once to show the beginning of the flowchart and once more to show the end of the flowchart. The only labels placed in this symbol is **START** and **END**.



The Terminal Symbol

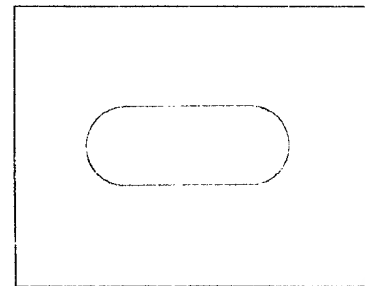
Let's go ahead and mark the beginning of our flowchart with it. The next symbol we will concern ourselves with is the process symbol, which is a rectangle. Most programs require a system setup to allow for use of the hardware within the system. We usually try to do this first, unless the system requires a lot of time to set up. We may then want to inform the user of this, and we may want to send an output notice informing them of this first. However you do this, remember to keep it simple and straight forward.

Don't confuse yourself or the user. I live by the simple K.I.S.S. rule. (Keep It Simple, Stupid) In programming, use of elaborate schemes to do something simple that can be accomplished by only one or two lines of code not only makes it harder on you but is an opportunity for more bugs to creep in. It wastes memory space better suited for the data.

Most programs manipulate

data of one kind or another. Data comes in two basic forms as far as the program is concerned. The first type is fixed data which is set within the program and stored in a memory register where the program can access at any moment it is called to do so. The next is variable data which the program also stores in a memory register but then manipulates the data and then rewrites the new data to the space where the old data was stored to retrieve for display or further manipulation as needed. Variable data is also stored to disks for safekeeping and further processing in the future.

The processing symbol is by far the most versatile and thus the most misunderstood symbol within the flowchart. A process is simply the work the computer does. It can do mathematical work comparison work or simply setting proper registers. Do not confuse comparisons made in a process with those made in a logical decision. These are not similar and are handled quite differently by the computer.



The Process Symbol

Using the process symbol is fairly straight forward. For each piece of processing you do, you will use this symbol. For a mathematical formula, we simply draw the symbol then write the formula within. For comparison work, we indicate what the computer is comparing such as Compare A to B. In register setting we can simply state what were setting by indicating the name of the register, and its new value such as Reg A=567 or if a string variable then Reg A=rest.

A process symbol is also used to indicate the loading of a separate module which the program loads uses then forgets until the module is needed again then it will reload it, use it again, and forget it again.

I know all of this is very confusing and as I do not wish to get into heavy details on the subject of flowcharting, I suggest you find yourself a book on flowcharting and go over carefully. It is a subject requiring more detail than I plan on giving.

There are several more symbols that I have not covered and again feel that the details of which are far beyond the scope of this series. In the next installment, we will cover syntax and the need to learn it.

From The Jargon File

BASIC n. A programming language, originally designed for Dartmouth's experimental timesharing system in the early 1960s, which has since become the leading cause of brain-damage in proto-hackers. This is another case (like Pascal) of the bad things that happen when a language deliberately designed as an educational toy gets taken too seriously. A novice can write short BASIC programs (on the order of 20 10 lfigpsub lines) very easily; writing anything longer is (a) very painful, and (b) encourages bad habits that will bite him/her later if he/she tries to hack in a real language. This wouldn't be so bad if historical accidents hadn't made BASIC so common on low-end micros. As it is, it ruins thousands of potential wizards a year.

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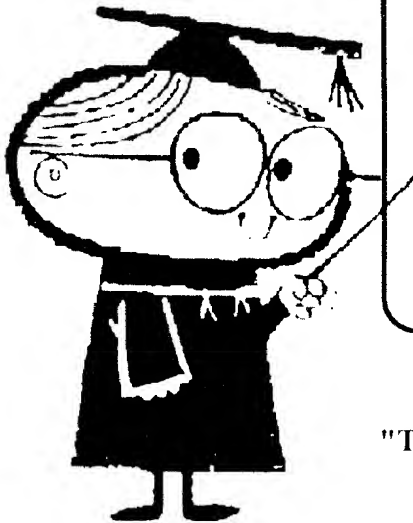
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The Complete CoCo/OS-9 BBS List

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| 4C's BBS | Mike Lebrun | (619)-936-0823 | 61:6130/102 | San Diego CA | 2400 | RiBBS |
| 80 Megz BBS | Jerry Carter | (612)-777-4193 | 1:282/4002 | Minneapolis MN | 2400 | RiBBS |
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| ACS BBS | Newton White | (404)-636-2991 | 1:133/510 | Atlanta GA | 2400 | OCN |
| Access CoCo of L.A. | Dave Spicer | (205)-598-2100 | 1:18/75 | Alabama | 2400 | RiBBS/OCN |
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| CoCo City | William Helloms | (817)-538-4745 | | Fort Worth TX | 2400 | RiBBS |
| CoCo Exchange | John Reece | (619)-272-3643 | 1:202/719 | San Diego CA | 2400 | RiBBS/OCN |
| CoCo Plus BBS | Edward W. Jones | (205)-341-1616 | 1:3625/461 | Mobile AL | 2400 | RiBBS/OCN |
| Coco Bug | D. Reed | (602)-996-8828 | | Phoenix AZ | 2400 | Spittire |
| Coconut Palms Hotel | Harold Kistner | (417)-887-6048 | | Springfield MO | 9600 | OCN |
| Color Galaxy An | T. Guzman | (714)-545-5156 | | Santa Ana CA | 2400 | Reis |
| Color Galaxy Mw | E. Levinson | (415)-883-0696 | | Novato CA | 2400 | Reis |
| Color Galaxy Pg | M. Jones | (909)-781-5825 | | Riverside CA | 2400 | Reis |
| Columbia Heights | Mark Johnson | (206)-425-5804 | | LongView WA | 2400 | OCN |
| Cup of Coco | Tony Podraza | (708)-428-0436 | | | 2400 | RiBBS |
| Data Stash | Kerry Kowalski | (414)-684-4115 | 1:154/888 | Green Bay WI | 2400 | OCN |
| Data Warehouse | Dennis Mott | (509)-325-6787 | 1:346/9 | Spokane WA | 2400 | RiBBS/OCN |
| Delta Systems | Bill Wittman | (716)-494-2520 | 1:260/215 | Buffalo NY | 2400 | RiBBS |
| Discus BBS | Yves Souliere | (819) 771 3792 | 1:163/519 | Quebec Canada | 2400 | RiBBS/OCN |
| Don's Nightmare | Don Strunk | (208) 265-5234 | 1:346/9.3 | Idaho | | RiBBS |
| Download Syndrome | Everett Chimbidis | (813)-367-1285 | | Southwest Florida | 2400 | RiBBS |
| Evening Edition | John Fox | (816)-429-5741 | | Kansas City MO | 2400 | RiBBS |
| Federal Hill | Steve Plank | (301)-685-6975 | 1:261/1104 | Maryland | 9600 | RiBBS |
| Fire House Pub Sfty | Al Stiebel | (607)-687-0944 | 1:260/452 | Owego NY | 2400 | RiBBS |
| Galactic BBS | Albert Baldish | (814)-535-1497 | 1:129/132 | Northwest Pa. | 2400 | RiBBS |
| Heart of Gold | Michael Godel | (403)-437-3864 | 1:342/13 | Alberta Canada | 2400 | RiBBS |
| House of Fire | Brent McLaren | (416)-601-0085 | 1:250/436 | Toronto Canada | 2400 | RiBBS |
| Indulgence | Dave Gantz | -private- | 1:346/9.1 | | 2400 | RiBBS |
| Interface | -unknown- | (619) 297-7733 | | | | |
| Kansas Konnektion | Gary McCarty | (316) 342-3967 | 1:295/5 | Wichita KA | 2400 | RiBBS |
| Keyboard BBS | J. Musselwhite | (403)-246-6943 | | Calgary AB | 9600 | MAXIMUS |
| Kzin BBS | Wes Gale | (604)-589-5545 | 1:153/912 | Surrey BC | 2400 | RiBBS/OCN |
| L'Equipe BBS | Michel Ricard | (514)-325-0659 | 1:167/232 | Montreal Canada | 2400 | RiBBS |
| MAC CC | Becky Bowers | (712) 366-5252 | 1:285/16 | Council Bluffs IA | 2400 | RiBBS |
| Marc's Place | Marc Bosley | -private- | 1:147/61.6809 | | 2400 | RiBBS |
| MidNight RiBBS | Gerry Thomas | (519)-457-3737 | 1:221/169 | Ontario Canada | 2400 | RiBBS |

| BBS Name | Sysop | Phone | Fido Node | Location | Baud | Type |
|-----------------------|--------------------|----------------|----------------|---------------------|------|-----------|
| Mustang Professional | Bill Nobel | (306)-978-1962 | 1:140/71 | Sask. Canada | 2400 | RiBBS |
| Norm's Place | Norman Rheame | (205)-661-5298 | 1:3625/464 | Alabama | 2400 | RiBBS/OCN |
| OS-9 Tacoma BBS | Chris Johnson | (206)-566-8857 | 1:138/164 | Seattle WA | 2400 | RiBBS |
| Ocean Beach | Warren Hrach | (619)-224-4878 | 1:202/610 | Ocean Bch CA | 2400 | RiBBS/OCN |
| Packer City RiBBS | Ron Margraf | (414)-496-1680 | 1:139/530 | Green Bay WI | 2400 | RiBBS |
| Point of Light | Howard Moore | (302)-422-5394 | | Delaware | | RiBBS |
| Pot O' Gold | Ken Flanagan | (604)-564-8869 | 1:359/251 | Brit. Colum. Canada | 2400 | RiBBS |
| RainyDay BBS | Steve Ricketts | (503)-663-6795 | | Oregon | 2400 | RiBBS |
| Randy's House | Randy Kirschenmann | (206)-473-5633 | 1:138/164.6809 | Seattle WA | 2400 | RiBBS |
| Rick's Roadhouse | Rick Miscavish | (204)-774-0247 | 1:348/102 | Manitoba Canada | 2400 | RiBBS |
| Rocky's Data Stash | Kerry Kowalski | (414)-684-4115 | 1:154/888 | Green Bay WI | 2400 | RiBBS |
| Side Door BBS | A.Stiedel | (206)-734-0597 | | Owego NY | 9600 | |
| Springwood BBS | Ed Langenback | (614)-228-7371 | | Columbus OH | 2400 | RiBBS |
| System Exchange | B.Andrus | (703)-323-7654 | | Fairfax VA | 9600 | MAXIMUS |
| TCCC BBS | Merv Curley | (416)-757-8903 | 1:250/404 | Toronto Canada | 2400 | RiBBS |
| The Basement | John Farrar | (615)-399-1801 | 1:116/27 | Nashville TN | 2400 | RiBBS |
| The Benchboard | John Evans | (517)-394-2447 | 1:159/290 | Lansing MI | 2400 | RiBBS |
| The Big Easy | Baron Schwing | (504)-464-0289 | 1:396/47 | New Orleans LA | 2400 | RiBBS/OCN |
| The Blue Parrot Cafe | Stan Wagner | (303)-757-6197 | 1:104/432 | Colorado | 2400 | RiBBS |
| The CoCo Library | John Wight | (808)-845-5299 | 1:345/200 | Hawaii | 2400 | RiBBS/OCN |
| The CoCo Workshop | Brian Steward | (203)-627-9264 | 1:142/264 | Connecticut | 2400 | RiBBS/OCN |
| The CoCo Zone | Charles Hein | (407)-433-3387 | 1:3609/27 | Orlando FL | 2400 | RiBBS |
| The CoCo Zone | Ober Bower | (214)-553-1649 | | Dallas TX | 1200 | RiBBS |
| The Computer Exchange | F.Beaudreau | (401)-762-4293 | | Satterville RI | 9600 | |
| The Diamond Mine | Richard Baysinger | (509)-325-5160 | 1:346/23 | Spokane WA | 2400 | RiBBS |
| The DogHouse | William Anderson | (509)-325-3169 | 1:346/21 | Spokane WA | 2400 | RiBBS |
| The DownEaster | Joe Richards | (207)-725-8035 | | Maine | 1200 | RiBBS |
| The Exotic Zone | Paul Ingson | (301)-969-3083 | | Maryland | 2400 | RiBBS |
| The Fido Exchange | P.Taylor | (703)-573-2246 | | Vienna,VA | 9600 | RiBBS |
| The Fun House | Bill Covert | (716)-372-7863 | 1:260/175 | Buffalo NY | 2400 | RiBBS |
| The Galactic Milieu | Eric Carson | (916)-893-5412 | 1:119/13 | Sacramento CA | 2400 | |
| The Golden CoCo | Terry Goode | (713)-941-1542 | 1:106/941 | Houston TX | 2400 | RiBBS/OCN |
| The Graveyard | Glenn May | (508)-792-0381 | 1:322/666 | | 34kb | RiBBS |
| The Keyboard BBS | John Musslewhite | (403)-246-6943 | 1:134/67 | Alberta Canada | 2400 | |
| The Lone Surfer BBS | J.Miller | (916)-742-5774 | | Marysville CA | 9600 | MAXIMUS |
| The MYThing Link | James Kebernik | -unknown- | 1:348/104 | | 2400 | |
| The Node III | Gene Clifton | (504)-347-4320 | 1:396/24 | New Orleans LA | 2400 | RiBBS/OCN |
| The Pink Rose | Michele Dalene | (203)-738-3064 | 1:142/178 | Connecticut | 2400 | RiBBS |
| The Play House | Doug Leonard | (916)-646-1907 | 1:203/348 | Sacramento CA | 2400 | RiBBS |
| The Royal Inn | Scott Pengelly | (416)-318-5462 | | Toronto Canada | | RiBBS |
| The Score Board | Harold Kistner | (417)-887-6076 | 1:284/2 | Springfield MO | 2400 | RiBBS/OCN |
| Thermal Fusion | Judd Terrell | (803)-967-9832 | | South Carolina | 2400 | RiBBS |
| Titanic | Darren Clift | (509)-255-5207 | | Spokane WA | 1200 | RiBBS |
| Tomcat's BBS | Tom Brewer | (405)-282-8250 | 1:147/53 | Oklahoma City OK | 2400 | RiBBS |
| Top Hat | B.Jones | (206)-244-9661 | | Seattle WA | 9600 | RiBBS |
| Trial Run | Tim Jones | (512)-280-6578 | 1:382/107 | Austin TX | 9600 | RiBBS |
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(Many thanks to Charles West and Terry Goode for their gracious help in compiling this list.)

Review:

InfoXpress

by Keith Bauer

Keith Bauer, 36, has been using OS9 since '87 while juggling his duties as a husband and father along with his computer time. Keith has written several programs for OS-9, only some of which have been made available to the public.

Of all my purchases at this year's fest in Chicago, the one that I was most excited about was *InfoXpress*. It was also the purchase that I was most apprehensive about. I had heard that you could set this program up to call Delphi and Compuserve in the middle of the night. I had visions of a 4 hour phone call on my bill.

InfoXpress is written by William Dickhaus and distributed by the Dirt Cheap Computer Stuff Co. It is available for OS-9 on both the 68xxx machines and the CoCo 3. I am using it on an MM/1. The hardware requirements are pretty basic. You must have at least one floppy with a minimum of 720k capacity or a hard drive. I strongly suggest a hard drive, as *InfoXpress* works with some rather large data files. You also need a hardware serial port, and this port must be capable of dropping the Data Transmit Ready line when a path to the port is closed. You cannot use a bitbanger port. Of course you will need a modem, and it must be capable of resetting itself when DTR is dropped by the serial port. The last requirement is memory. You will need a minimum of 512k. On OS-9 Level II systems, you will need at least 192k free and 10k of system map space.

Since I was in Chicago and my MM/1 was 300 miles away I had time to actually read the manual. When you first look at the manual, you realize this is no ordinary package you just bought. The manual comes in a 7" x 9" 3 ring binder. The pages are very crisp and easy to read, very professional. *InfoXpress* does have an install script file for getting everything setup, but it is fairly basic. I would like to see something that is more interactive, asking you where you want to store the script files and the help files and which commands directory to copy *InfoXpress* to. You should also be able to run the install program right from the floppy, after you made a backup copy of course, and put the files in their proper place. The files come compressed in AR format, and you

need to copy the supplied AR executable file as well as the install script file to the directory in which you will be setting up *InfoXpress*. I chose the root directory on /h0. The install program makes a directory called IX and then calls AR to unarchive all the files to this directory. It then sets the attributes on IX and IXUSAGE and copies these to the /dd/cmds directory. All in all not a bad way to do it but I still feel that it would be nice to pop the floppy in, type install and let it go from there.

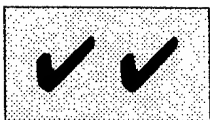
Once it was installed I had to check out the configuration file. There are two files provided that you can check to see how things are done. The default file (default.ini) is set up to call Compuserve and capture two forums and mail.

I won't go into each option that you can set up, but I will list a few. You can have it save a log of your login and forum entry times as well as the exit times. On the OSK version you can save all the information that is sent out as well as that which is sent out to a log. This comes in handy in case you have a problem logging on at night. You can go through this and see what took place. You can setup the network option to try different nodes in case one is down or busy. You are also able to setup modem initialization strings.

InfoXpress allows you to define how long you want to keep messages, and each message base can have a different life span. You can also set a history option to save all messages after they become old or you can just save those messages that are to/from you.

I just changed the defaults to match where I stored the help and script files that *InfoXpress* uses. I changed the phone number, user id, and password, of course, as well as the entry for a 9600 baud modem. With these few changes I was ready to give it a test run.

If you use the default.ini file you will need to be in that directory or use the -c= option and



give it the full path to where the file is located. Once you are in *InfoXpress* help is just a keystroke away. By pressing the '/' key a list of all the options comes up. You will see that you have many options when going online. You can just process your requests (send your messages) or go online in manual mode. The option that you will use most often is to go online in automatic mode. You just select 'o' and choose which service, or all, you would like it to call everyone. Then just sit back and watch it perform.

When you go online for the first time you must set your high message number. Unless you were keeping a log you will most likely have to login with your telcom program and check to see what the last message was you read. If you do not tell *InfoXpress* this you will start at the beginning and most likely run up a very large bill. You set the high message number by selecting 'h', choose a system and enter in the message number.

Once you have collected all the messages, you can then read them using *InfoXpress*. You can either view all the messages in a given forum or just the new messages. Most times it will be just the new ones. *InfoXpress* will show the messages in threads, and you can move forward and backward through them. If you see one that you want to reply to just press 'r'. You then have the option of quoting text from the message you are replying to or not. Your favorite editor is then fired up (the editor name is taken from a setting in the default.ini file) and you use it as you normally would. If you choose to include the text from the message you are replying to *InfoXpress* will insert a '>' before each line. When you are done, just save the message and quit your editor as you normally would. You are then returned to the message and you can continue to read the remainder of your messages.

I think the best feature about *InfoXpress* is its ability to be run in

the middle of the night when the phone rates are the best and the services are the least active.

InfoXpress has proven to be an EXTREMELY solid program. I have run across only one bug that needs to be fixed. If you 'zap' a message using the 'z' option the next time you reorganize that message section it will become unreadable. You end up having to delete that message base and start over. I am sure that will be addressed in the next update. (*This has been fixed. -Ed*). In the mean time, I no longer use zap and everything works great. I would highly recommend this program to anyone that is a member of either Delphi or CompuServe as it will save you time and money. The author should be applauded for the great time and effort that was put into this.

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Modem Madnessthe beginning

by Rogelio Perea

Rogelio Perea, 26, has worked on various Color Computers from an MC-10 (still has it) to his CoCo III since they first became available. He has worked with TRS-80 Model I and III and has written a number of highly technical programs. When he is not working at his job as Chief Engineer for a major AM/FM radio station, he is busy with his family.

And it all begun with the Direct Connect Modem Pak.

Yes, for me the world of telecommunications opened up using the DCM. I have worked with Color Computers since I was in college, way back in 1982. They taught us 6800 uP programming there and the CoCo I was a natural at class. Now I am a proud owner of a 512 K CoCo 3, CM-8, FD-502 with 2 drives, a DMP106 printer driven by a parallel interface and about 100 floppys filled with software. One coworker asked me at some time, "You should put up a modem with your computer", beign skeptical then I replied, "A modem?, what for?" Now I KNOW what for!

Visiting the RS store in my area I found a DCM for about 10 dollars, so I decided to get one (a real bargain). Got home, hooked it up and played with it for some time, the pain of plugging the PAKs in and out didn't bother me enough, after installing the phone line I was ready to get on line with whomever came across. I dialed some BBS's and after getting a response it felt really good to become part of this community in a more direct fashion. The limited display of the DCM and its 300 baud speed started to get bothersome (and expensive!!!), that's when I decided to get a real communications program with an external modem also. At work I have an account with CIS, so using the PC's there I began to look around for software.

After joining the CoCo and OS9 Forums I downloaded Mickeyterm, Ultimaterm and Greg-E-Term. Trouble was, how to transfer the files to my CoCo at home. Fortunately, Procomm Plus (the package I use with the PC) has a mini-host option within, after setting this mini-BBS at the office I ran to my home to do some experimentation. Hooked up the DCM with a tape recorder and got on-line with the PCPlus BBS. The file transfer was rather lengthy but succesfull. Then came the task

to transfer the data on the tape to the disk, an easy task accomplished with a file transfer program. All was OK now, the files were on the disk, but, they were not executable!!! Why? Well, the DCM saves the files on tape, and this tape file has absolutely no definition as what type of file is saved there, and this situation reflects also in the disk file. Out it came the trusty old disk editor, changed the file attribute bytes on the directory at track 17 and presto! For some reason, only Mickeyterm worked correctly (maybe a dropout in the tape ruined the other two) but it was enough to set up the external modem.

It has been a while since that experience with the DCM. It shure paid off more than enough the 10 bucks I invested!!! Now, I use Ultimaterm 4.0 most of the time (I like the little window were the incoming or outgoing data scrolls through) and I'm ready to get things running at more than the 2400 baud the bit-banger limits me now (with the aid of a stray MPI I found at a swap meet). Maybe the DCM will get some use as a RS232 Pak. Still, I HAVE to try using the bit-banger port with OS9, as I have found a driver that supposedly makes OS9 work at 1200 baud. I'll get my hands on this and will share my findings with all the CoCo community.

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Early History and Development of the OS-9 Community NetWork

by Dave Kelly

It's been a little over a year and a half since some of us on the OS9 FIDO echo started talking about what we could do to keep the OS9 operating system alive.

Since FIDO has a competent organizational structure, it was decided to utilize that concept. Thus a name, OS-9 Community Network (OCN), was adopted and an International Coordinator and International Librarian was appointed. Then volunteers for the coordinators and librarians for the 9 regions in zone 1 were found.

A set of guidelines was developed stating that the OCN would support the preservation of OS-9, OSK and OS-9000. Several other offices are detailed for when they become necessary. This guideline is available for downloading from any OCN library.

A request for members was announced on the OS-9 and COCO echos and to date about 400 people have opted to have their names listed. These include people from Europe, Canada and Australia.

From The Jargon File

sysop /sis'op/ *n.* [esp. in the BBS world] The operator (and usually the owner) of a bulletin-board system. A common neophyte mistake on FidoNet is to address a message to 'sysop' in an international echo, thus sending it to hundreds of sysops around the world.

Recently, Peter Tutelaers, a college student majoring in computer science and living in Leende, The Netherlands, has started to develop a world wide group of OS9/OSK users. There are also other networks: OCN now has representatives on DELPHI, Internet, AcBBS, and StG. While we

started on FIDO, we are working to expand our area of coverage, and messages are exchanged between these networks. Peter can be reached on the Internet at:

`os9peter@stack.urc.tue.nl`

An extensive network of OCN libraries has been put in place to allow anyone to be able to get the latest programs as they are developed. This list is published elsewhere in this issue. You do not have to be a member of OCN to access these libraries. They are free to all. Brian Steward in Chicopee, MA, posts the new programs as they are received from the International Librarian.

All OCN libraries are set up the same. If a program is in a certain library SIG on a BBS on the east coast, it will be in the same SIG on a library on the west coast, thus, making it easy to find what you want.

If you wish to have your name listed on the membership roles, post a message on the OS9, COCO, COCO CLUB echos or FIDO to Greg Morgan, or write him directly:

Greg Morgan
7859 Villa Park Dr.
Richmond, VA 23228

Membership can also be obtained by contacting:

Tom Birt
on DELPHI OS9CN
on CIS 76640,1205

or on StG:

Phil Scherer
PyKONS

or on Internet:

John Donaldson
`mm1@hounix.org`

Hardware Hacking

MM/1 Function Keys

by Zack Sessions

Using the keyboard function keys on the MM/1 has been a bane to both users and programmers since the machine first came out. The keyboard driver built into the KWindows interface normally uses the function keys to flip to different windows. In fact, those keys return nothing to the user so even within a program they could not be accessed.

However, recent messages over the computer networks have revealed how to make use of these keys in spite of the barriers placed by the KWindows interface. —Ed.

Using display commands, you can define something which has essentially a Get/Put buffer in it, but its contents are handled in a pretty neat way. You then load the buffer with data with a display statement like the following:

```
$ display 1b 2b f0 fkn 00 00 01 00 01 00
05 /dir/ 0d 00
```

For the *fkn* parameter, substitute a value from \$01 to \$08. This number relates to the eight function keys F1 to F8. Notice that OSK display can display text by enclosing the data with forward slashes. What this command does is equate the character string **dir<CR>** with a function key. In this example, say *fkn* is \$01, then any time after the display command the F1 key is pressed, the MM/1 will act just like one had keyed in **dir<CR>**. Instant variable function keys!

Note that the *TYP* byte is \$00, and the values of the *X* size and *Y* size are irrelevant, but a value larger than zero must be used (I think!). The size bytes **MUST** be right and must contain the length of the string, plus a possible (but not required!) carriage return byte (\$0d), and also include the terminating \$00 byte.

With Windio edition 46, the function keys F1 to F8 no longer select windows 1 through 8. The only keys now used to flip to another window are the F9 and F10 keys. They still work as they used to, and you probably cannot redefine them with the previous command. (I don't know, I haven't bothered to try)

The *f0* before the *fkn* means that this is a system-wide function key definition and the buffer number is the number of the function key. If you do the display command in /w1, and you flip to /w2 and hit the appropriate function key, it will react as it was programmed in the other window.

One can override the system definition first defining the data in a normal Get/Put buffer. For example, if your pid is \$06 and you want to use buffer number \$2a, and you want to use the F1 key to now

do an **mdir-e** command instead, you would define the buffer with:

```
$ display 1b 2b 06 2a 00 00 01 00 01 00
09 /mdir -e/ 0d 00
```

This just defines the buffer, a normal Get/Put buffer which obviously does NOT contain "graphical data"! Next, to tell windio that this buffer is to now be the return value of a function key, you would do the following display command:

```
$ display 1e 26 grp bfn fkn
```

Where the values of *grp* and *bfn* should be obvious, and *fkn* is, as before, a number between \$01-\$08.

There is NO way to revert this back to the previously defined system-wide command **IN THE CURRENT WINDOW**! You can, of course, define another process specific Get/Put buffer which has the same definition as a previously defined system-wide definition. Function key associations using the last display code sequence are good for the life of the window they were issued in and good **ONLY** in the window they were defined in.

So, if you want to use some application specific definitions in a program, it is best to open a path to the next window, /w, and use that window for all screen operations and new function key associations. When you close the path to that window and re-select your original standard IO path window, you go back to the system wide definitions (if any).

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- OS-9/OSK Answers! Matthew Joel Hegberg
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On The Lighter Side

Here is a list of some of the files you might find on your local BBS. Enjoy!

| Filename | Description |
|-------------------------|--|
| BBS.FBI (75K) | List of bulletin boards being monitored by the FBI |
| BBS.OK (3K) | List of bulletin boards not monitored by the FBI |
| BBS.BAD (50K) | All the popular BBS numbers that were answered by incoherent groans (Numbers checked at 2 a.m.) |
| BBS.LST (197K) | List of all the lists of BBS sites |
| WELDING.AR (20K) | Calculates length of discarded arc welding rods |
| WORMER.BIN (512K) | Flushes worms from the system by filling up every bit of memory. (See the 2 meg version for those of you using extended memory) |
| SQ79.SQE (0K) | The latest, greatest squeezer! Far more effective than anything yet devised. Does not work with standard sq/usq, and as yet we're having some trouble with the companion UNSQ79. Before it squeezed itself, SQ79 was a 75K .BIN file |
| AR1.9.AR (235K) | This is the AR that everyone's been waiting, and waiting, and waiting, and waiting for. Requires AR1.9 for deARing. Isn't compatible with anything. You should have fun with this |
| SDIR270424.AR (32K) | Yet another directory program |
| CLEANUP.BAS (10K) | Adds line numbers and GOTOs to PASCAL source code. (This program released to the public domain by Microsoft.) |
| CLEANUP.PAS (10K) | Removes all line numbers and GOTOs from BASIC source. (This program released by Borland in response to Microsoft) |
| BAGPIPEMAN.UME (33K) | This is a version of PIANOMAN for people who want their neighbors to know that their CoCo can play music. Range is estimated at 12 miles |
| DOGWHISTLEMAN.BIN (33K) | Lets you practice music on your MM/1 without bothering your family. (Caution: In areas with high dog population, neighbors will howl.) |
| 3X5.AR (12K) | The best full-screen notecard program we've seen! Reduces the screen work area to the size of a standard filecard. For a larger work area, see: LEGALSIZE.AR or FILEFOLD.AR |
| CRIPPLE.AR (2K) | This is a great example of the quality software available for free! CRIPPLE is a double entry accounting system that's compact and mouse-driven. Those who want to expand the system can purchase the following modules from the author: Accts Receivable-\$695, Accts Payable-\$695, Inventory-\$695, Payroll-\$695, Printer Interface-\$695, Keyboard Input-\$695, Disk Interface-\$695, and Screen Display-\$695. There's a 5% discount if you Purchase all the modules at the same time. (FHA financing may be available.) |
| DEFOOGU.LZH (24K) | This program encodes text files. Enter DEFOOGU and you are taken through a 27 step encoding routine that's designed to confuse all but the most careful note takers. To decode, you just run the program backwards: Enter UGOOFED <cr>, and then enter all previous keystrokes in reverse order. This usually works |
| ADECODE.LZH (10K) | Because a few folks had trouble manually decoding DEFOOGU'd files, we wrote DECODE. Just enter: DECODE (filename), and DECODE will recover the original text without any operator entry. DECODE will work with almost any file created by DEFOOGU |

(Thanks to Micro-Cornucopia Micro Technical Journal)

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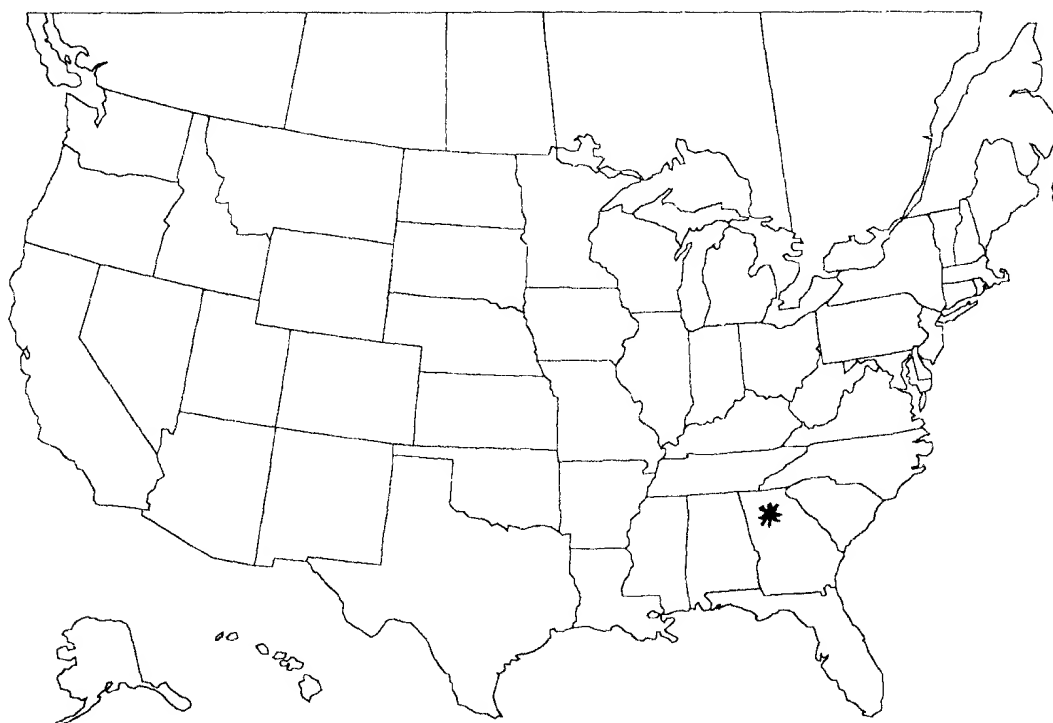
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